

Acquisitions—Techniques for Measuring Strategic Fit

Christopher J. Clarke

This article examines some of the reasons for a current disenchantment with the acquisitions boom. It argues that an important factor in achieving success is a good strategic fit between the acquiring company and the target. To achieve this requires measurement of the synergies in financial terms and what they can do for the acquirer. Methods of analysis are described which can improve the success rate in these operations.

It is very usual at this stage in an acquisitions boom for doubts to be raised as to the wisdom of many acquisitions. In recent months there has been much in the financial press, as well as from business academics, prophesying nothing but ill from the current merger boom. Barnes (1984) found, on average, that limited gains to acquirers' shareholders at the time of purchase became losses within 6 months.¹ Franks and Harris's recent research indicates that on average U.K. firms seem to benefit from making acquisitions but not to any outstanding degree.² The main grounds for pessimism include: evidence of nil or negative changes in the value of shareholders' holdings in companies making acquisitions and evidence that in the minds of managers in acquiring companies approximately half of acquisitions do not fulfil their expectations.³

One popular theory has it that 'Managerialism', the use of acquisitions to boost the personal position and reputation of senior managers against the interests of their shareholders is a possible cause of acquisition failure.⁴ One could propose that managers are driven by ambitions which lead them to override the interests of shareholders.

Alternatively, bidders may believe so much in their own abilities that they rush in where angels fear to tread. Carried away in the heat of the moment, managers may exceed their original price limits. These views of management are very unflattering.

In theory, the corrective method to curb bad management decisions in making bids, is the shareholder withdrawing consent. This can be done by selling the shares, depressing the price and weakening the bidder's position, or by voting against the bid in shareholder resolutions or later re-election of directors. Most shares are held by institutions and they should, therefore, have the responsibility and the power to limit the actions of management.

In practice, the channels for such control are unclear. Selling a predator's shares after a bid announcement often reduces the value realized by the selling institution, as share prices have already fallen. Voting against directors also weakens the share price and, therefore, the value of institution's holdings. Either is the equivalent of a shot in the foot for the institution. There is, therefore, a case for arguing that management may be inadequately curbed in its predatory behaviour. A mechanism may be needed to get the purchasing companies and shareholders to vote on specific bid proposals before they are allowed to proceed.

Others blame the overenthusiasm of city firms for merger mania. Merchant banks make large transaction and underwriting fees from merger activity, irrespective of the resulting long-term success or failure of their client's businesses. One planning director recently suggested that the average span of attention of a merchant bank on analysing the business logic behind a bid can be as short as a few days. The deal is the only real item of interest. We can conclude that the custom by which the emphasis is on rewarding merchant banks for transactions rather than analysis is at fault. If firms paid a separate fee for analysis instead of focusing payment on the transaction they may well get better results. Although there is undoubtedly some truth in both of the above causes of acquisition excess, the fundamental obstacle to a higher success rate in acquisitions is a widespread lack of strategic analysis. It is often, tragically, the case that to justify a major investment in an existing business, a major and

detailed project analysis takes place. Senior management gives such proposals a very thorough scrutiny. On the other hand, to move via acquisitions into entirely unknown territory can often be accomplished with a minimal amount of justification, research or analysis. Such analysis which does take place is often very much accounting driven. Ratios are struck from available balance sheets and profit and loss accounts and quick estimates are made to establish the real value of assets. Any performance improvements needed to justify the purchase price are often based on assumed synergies. What is needed is a more thorough method of analysing potential acquisitions.

Ultimately there are only two possible reasons why an acquiring management should be able to extract greater returns to shareholders from the assets of a business than previous incumbents. Firstly, they may be better managers and secondly they may bring the so-called synergy effect, by which the merging of two separate businesses realizes gains to shareholders. We will only deal briefly with the concept of superior management. It is probably a sad fact of life that the belief in one's own ability needed to achieve board level can lead to that belief being developed to an exaggerated extent. In recent discussions with a wide range of companies planning acquisitions, often the only reason given as to why the target will prosper better under new ownership is managements' belief in their own superior skills. Sadly, for every BTR and Hanson Trust, there is an Imperial Group buying a Howard Johnson. For that majority of firms, therefore, which cannot rely on superior management skills to make acquisitions successful, the most that we can do is to seek ways to enhance the chances of achieving synergy. It is on the analysis and evaluation of synergy and fit that the remainder of this article is focused.

There are two types of analysis which can be used to investigate the degree of fit between acquisitions. These are 'hard' and 'soft' concepts. Hard concepts seek to measure the direct impact on financial results of putting two firms together. Soft concepts can be used to investigate the less tangible elements of fit, for example, the question of how two different corporate cultures will interact. We will consider both types of concept here beginning with hard concepts.

One excellent method of analysing the extent of possible synergy is to use the value chain. This has been extensively used by a number of strategic consulting firms for many years. It has recently been popularized by Michael Porter.⁵ Its main use is in identifying how synergy can give competitive cost or differentiation advantages. The value chain has a number of useful applications in acquisition analysis. Firstly, it is possible to use the value chain to evaluate the potential impact of acquiring a business with a common chain element, i.e. backward or forward

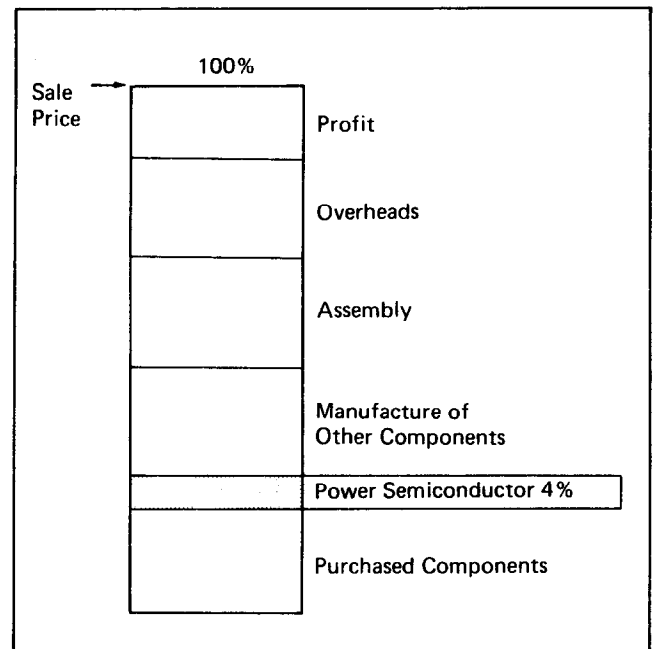


Figure 1. The use of value chains

integration. Figure 1 shows the value chain for a variable speed drive manufacturer. These products are high technology electronic devices used to efficiently control electric motors in a wide range of industrial applications. A component in their manufacture and of significance in their technical performance can be a power semi-conductor. As part of a larger assignment we were asked to consider the potential benefits to a manufacturer of such a power semi-conductor from forward integrating, by purchasing a leading producer of variable speed drives. The management felt that producing the power semi-conductors would give them significant cost and know-how advantages.

As can be seen from Figure 1, in cost terms the power semi-conductor is only a small element of the value chain. Even a 50 per cent cost advantage in that component would have only a small impact on the cost of the overall product. We also stood the argument on its head and asked what the extra volume from buying a leading drive manufacturer, which was not a current customer, would have on the economics of producing the power semi-conductor. Costs followed a classic experience curve. Even the volume needs of the world's largest producer of variable speed drives would not have reduced the unit cost of the client by more than a percentage point within 4 years. In addition, current customers might have been less than happy with a move in this direction. The value chain provided a way of quantifying the synergies and proved them lacking. We have also used the value chain effectively in this way to point out the extremely small synergy between a travel operation and its advertising agency which it at one stage felt to be a tasty morsel.

When the value chain does show considerable

overlap a second order of analysis has to be brought into play. This entails the concept of cost driving factors. A cost driving factor is the primary influencer on costs for each significant value chain element. Identifying them requires a deep analysis of costs. A recent example helps to show where cost synergies may or may not occur. In the case of Philip Morris's purchase of General Foods, both companies are in branded fast-moving consumer goods. At first sight there may seem to be extensive cost synergies and common management experience in everything from purchasing to physical distribution, from advertising to grocery selling, from customer billing to credit control. To evaluate these synergies is a major exercise. It firstly requires the comparison of value chains for major products and then for each important item in the chain an examination of how costs will change if the two firms are brought together. We need to identify what are the cost driving factors behind each element of the value chain. Let us take as an example some of the areas of a large food firm and a large tobacco company and see where synergies might occur.

On the marketing side, the scale of the two companies and the widely differing brand identities would be unlikely either to reduce the number of brand and marketing managers or to trigger any further benefits in advertising purchasing terms. The cost driving factor which would reduce unit cost in this case by spreading the brand managers budget is the volume of the individual brand. As grocery buyers in leading supermarkets are different for tobacco products from those for food products, economies from the amalgamation of grocery sales forces would be extremely limited. The cost driving factor is the number of calls made per salesman. There could be some savings in in-store merchandizing where one team could possibly merchandize

both groups of products, but the special security needed for tobacco may block this.

For logistics, the cost drivers are to do with operating full truck loads and the optimal number of well-located depots to minimize fuel costs, driver time and stocks. Both General Foods and Philip Morris can often already operate full trucks for supermarket deliveries. For small outlets there could be some economies from mixed loads. Both organizations have distribution depot networks scaled to current needs. The opportunities to close depots and open joint ones, therefore, would be on an extended timeframe and require investment in the new larger facilities. In fact, other than in corporate headquarters and customer administration costs it is very difficult to see where major joint economies can be found for Philip Morris and General Foods. The rationale that General Foods can use Philip Morris's cash to expand, smacks of managerialism. Such cash is available through the bond and equity markets at commercial rates. There may of course be more opaque reasons behind this acquisition.

A third method of analysis is to focus on the productive and selling resources of the two businesses. Figure 2 shows a means of illustrating the impact of putting two engineering companies together by means of resource portfolio which was developed at A. T. Kearney Inc. A resource is defined as an activity that adds value and cost to a product or service, e.g. a salesforce, a warehouse or a machining centre. The resource portfolio illustrated has on its vertical axis the growth in the installed capacity across the whole industry in the relevant geographic market. The horizontal axis shows the cost per unit of throughput in a resource, relative to those of the best-placed competitor. Figure 2 shows some of the resources of two real companies,

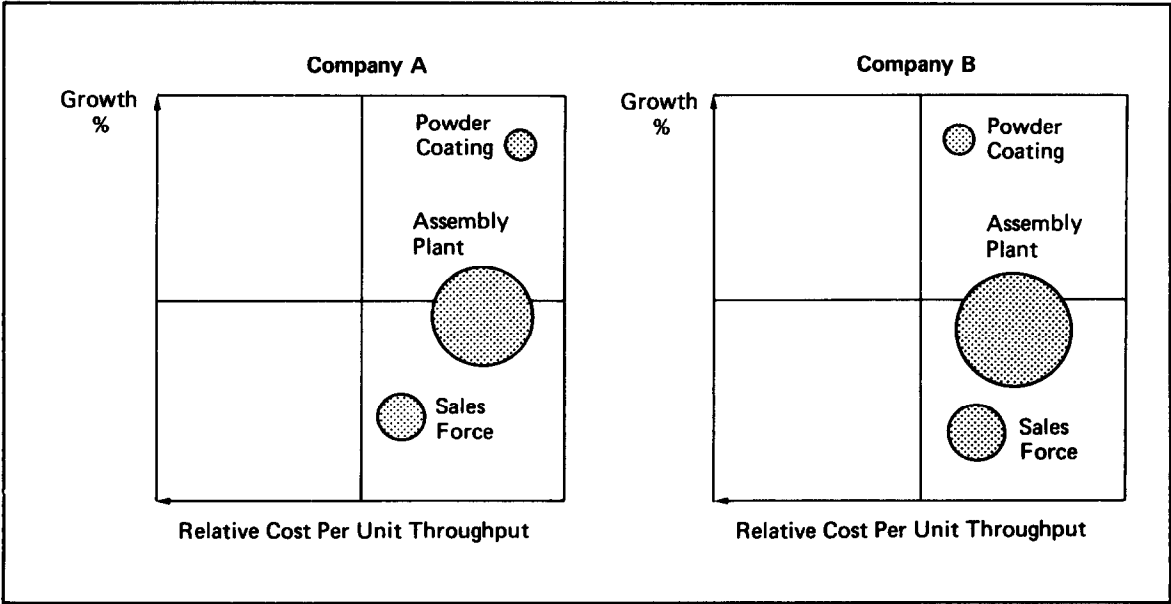


Figure 2. Resource portfolios. Two engineering companies

suitably disguised. Both company A and B have a weak resource position with respect to their sales forces, assembly plants and powder coating. The merging together of the two companies allowed the assembly and powder coating plants to be consolidated in company B's factories. In this case capacity utilization was the main cost driving factor in both of these areas. It was decided not to merge the two sales forces as a loss in volume would have resulted. The impact of this strengthening of the resource position through merger is shown in value chain terms in Figure 3. This type of capacity driven synergy is common where fixed costs are high.

In evaluating which cost driving factors can have the biggest impact, the checklist in Table 1 can be used for each of the main activities in the value chain and resource portfolio. The synergies possible from acquisition are also illustrated. In identifying and evaluating cost driving factors it is important to work with industry and technology experts from within or outside the acquiring organization. This

combination of strategic financial evaluation and deep industry and technical knowledge is extremely powerful.

Many recent bids have had potential cost-based synergies. Guinness's purchase of Distillers offered opportunities for consolidation with existing distilleries and consolidation of overhead departments and of production capacity in the glass bottle producing subsidiaries. Electrolux's purchase of White, the U.S. white goods firm offered potential synergies in all the areas shown in Table 1. In particular White used to purchase 450,000 front-loading washing machines from rival manufacturers each year. Electrolux will produce these elsewhere in its empire.⁶

However, not all synergies are cost driven. Table 2 shows some differentiation synergies which can also be reasons for acquisition. These allow the acquiring company to gain non-cost-competitive advantages, such as wider distribution, superior product or

Table 1

<i>Cost driving factors</i>	<i>Possible acquisition cost synergies</i>
Capacity	Plant consolidation to operate at full capacity
Scale/critical mass	Access to new markets or distributor channels to achieve critical mass which gives economies of scale
Learning effect	Access to skills/management to build on existing learning
Low factor costs	Access to lower cost resources
Logistics	Access to new operating locations beyond the current economic range of delivery
Technology	Access to proprietary designs Joint R & D facilities Lower overheads through improved systems

Table 2

<i>Differentiation factors</i>	<i>Possible acquisitions synergies</i>
Additional product range	Better selling terms
Fills gaps	Ability to close out competition
Extends range	Brand switching benefits
Strong brand images	Opportunity to use for other products to enhance prices or volumes
Customer base/geographic penetration	Additional sales through established relationships and channels
Logistics/administrative service	Enhanced sales/price potential
Superior quality performance	Enhanced sales/price potential

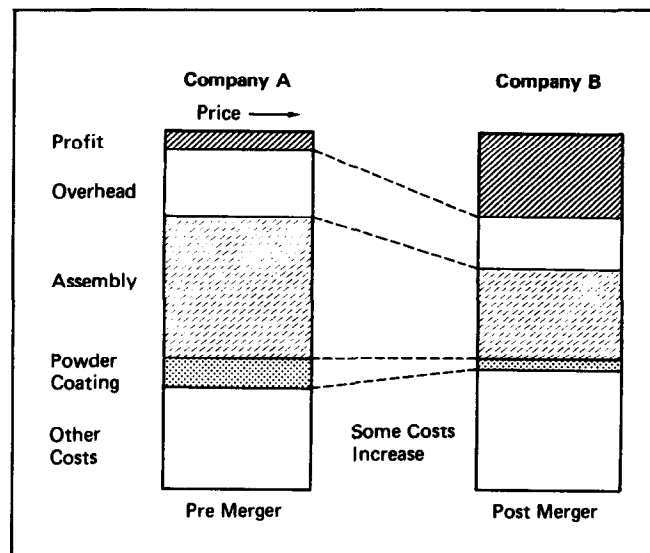


Figure 3. Use of value chains. Change in product unit costs

service performance, better quality standards or image.

The lost opportunity for Landrover to merge with General Motors offered major potential to use General Motors' existing geographical coverage, dealer network and service which the other interested parties could in no way match. This could have generated significant volume increases, or price advantages, both of which can be estimated by analysis.

Another example of differentiation synergy is the ability of Japanese companies such as Hitachi and Toshiba to enhance the quality of output in factories which they acquired in the United Kingdom. This has added value to the products and, no doubt, sales of their operations.

Both differentiators and cost advantages must be checked for validity. In November 1972 Barker & Dobson purchased Waller & Hartley for nearly £5m, Barker & Dobson had a large range of sugar confectionery, as did Waller & Hartley. The bulk of both businesses was conducted through the multitude of Confectionery Tobacconists and Newsagents shops (CTNs). Typically, each of these had ordered the minimum delivery drop from both companies. Waller & Hartley also sold heavily into Woolworths, which in those days was almost dominated by its confectionery department. Pre-acquisition sums assumed that Barker & Dobson would add the Waller & Hartley volume to its own, for CTN customers, and achieve instant and heavy penetration of Woolworths giving much improved volumes. At the same time consolidation of production would reduce costs. The acquisition, therefore, looked very attractive. In the event the CTN product ranges of the two companies overlapped to such an extent that when the firms were merged and sales forces and factories amalgamated, the CTN customers merely ordered the minimum drop size from the newly merged organization and sales were reduced. Woolworths subsequently reduced its exposure to confectionery, diversified its suppliers and declined in relative market importance. This disastrous acquisition started Barker & Dobson on a long decline from which it may only now be recovering.

In measuring the impact of the cost synergies and differentiation synergies of a potential acquisition, it is essential to look at the impact on the present value of cash flows of the merged companies. Each supposed synergy item should be evaluated and its effects on revenues and costs carefully estimated. It is helpful to develop a computer model to do this, as it allows simulations under various assumptions to help evaluate risk and sensitivity. It also allows more time to be spent on strategic thinking and less to be spent on routine calculation. The additional net present value of the cash flows available from the acquisition can also be used to estimate the potential

value, and therefore maximum price to be paid by the acquirer. Figure 4 shows a simplified illustration of calculation of cash flows resulting from synergies. There are detailed descriptions of discounted cash flow analyses available.^{7,8}

The analysis so far has focused on the 'hard' aspects of synergy. There has been increasing concern in recent years, however, over the soft aspects. Essentially, how well will the acquired company thrive and take root in the alien soil of the predator? The analytical process here is analagous to tissue typing to avoid the rejection of an organ transplant. To do this I have developed a concept which is called the 'culture web'. It makes it possible to measure various cultural parameters and at the same time to see visually the degree of fit of the target with the purchasing company. Any number of dimensions can be shown in one diagram.

Figure 5 shows an example of some scales on a culture web used in analysing the merger of two financial institutions in preparation for the Big Bang in the City of London. Most of the information needed to quantify and scale the spokes of such a web can be obtained with a little research.

Figure 6 shows the two entirely different profiles of the two merging financial companies on the scales outlined in Figure 5. On nearly every point the dynamic, young and small, trading/financial organization was at the opposite end of the spectrum to the large, long-established bank which took them over. Only a few weeks later the key people in the smaller firm left, as a team, to join a rival organization. This left the big bank with a handful of dust for its considerable expenditure.

When faced with big cultural differences like those in Figure 6 the acquiring company has three stark choices:

- (1) Walk away from the target on the grounds that the lack of cultural fit will destroy the synergy potential.
- (2) Consider how the acquiring company can change its culture to accommodate the target company in order to enable the synergy effects to be realized. In the case of large and long-established firms this may be unrealistic because of the strength of the cultures involved, unless the target is insulated in some way. One way of doing this might be to separate the new addition organizationally. However, this makes realizing potential synergy difficult as the benefits occur through integration.
- (3) Plan to alter the culture for the target, post acquisition. In doing this it is important to consider the impact on the morale and performance of the acquired company. It is extremely difficult to change the culture of a small dynamic organization to fit that of a large stable one.

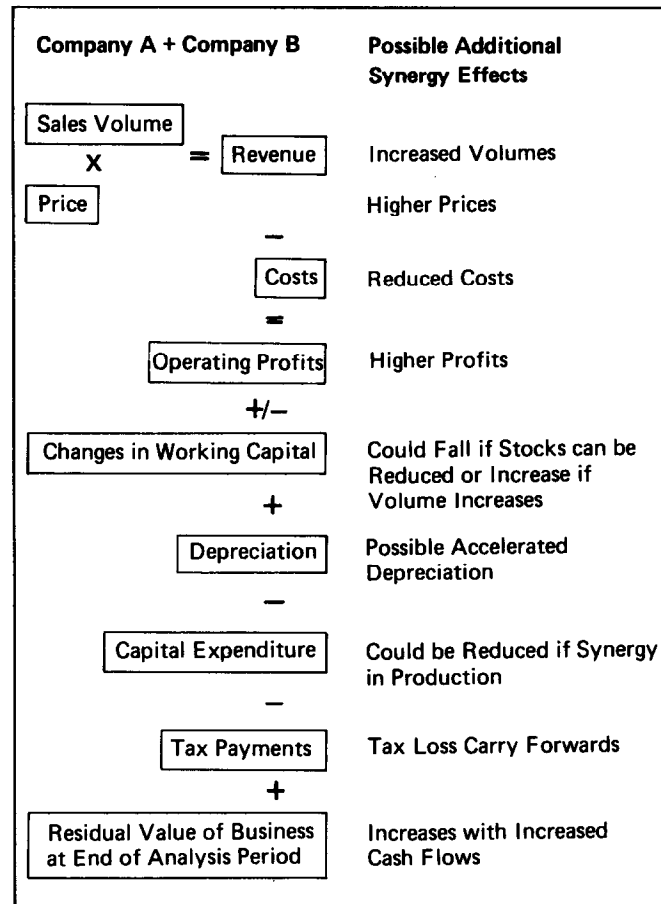


Figure 4. Calculating cash flows

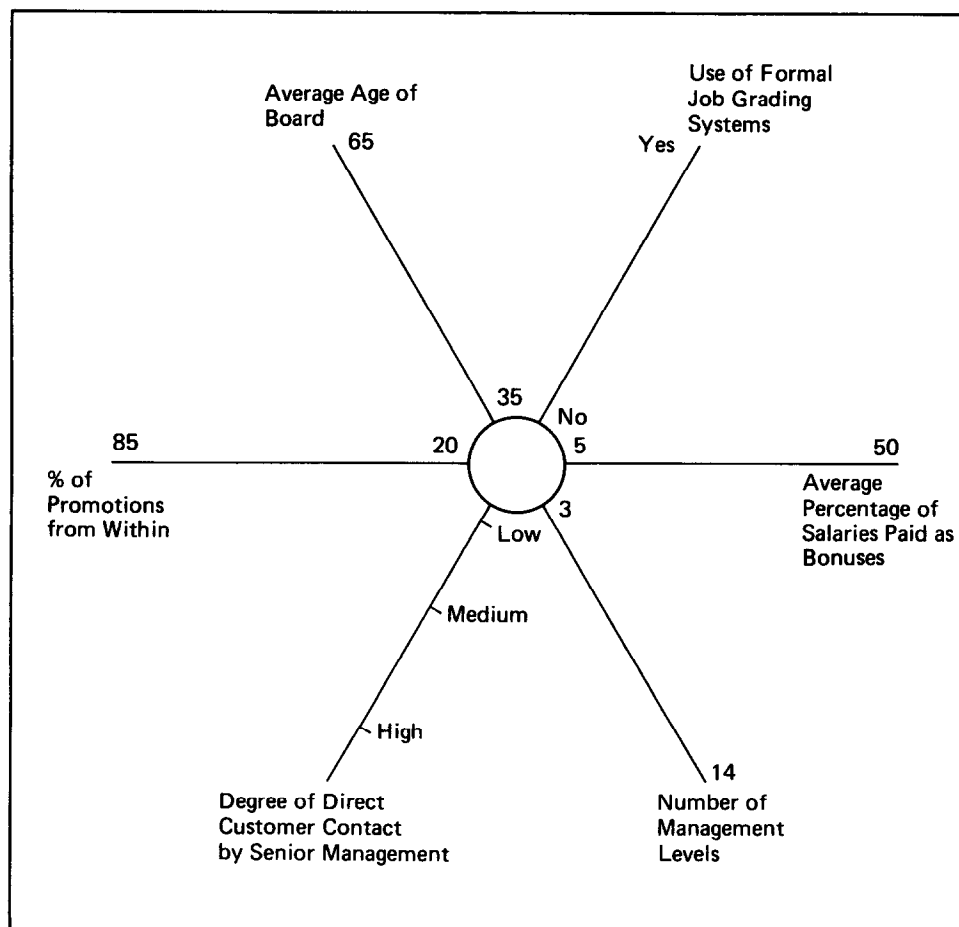


Figure 5. The culture web. Assessing a financial institution

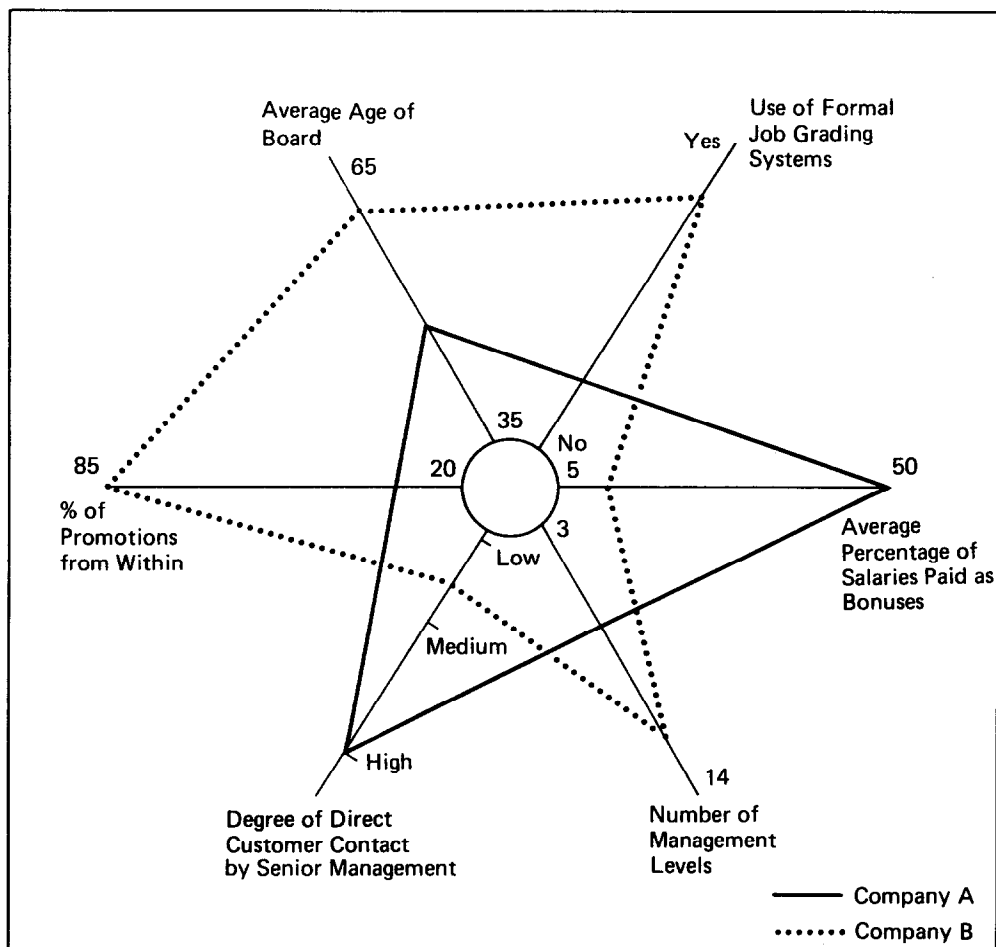


Figure 6. Culture web. Two merging financial firms

If cultural changes are necessary for success these need to be carefully planned before the acquisition and monitored in implementation.

Let us summarize the three key messages of this article.

Firstly, synergy is crucial in making sure that your acquisition is one of the minority which clearly benefits the shareholders of the acquiring company. Secondly, such synergy can be analysed and quantified as to its potential using a number of techniques to reveal cost and differentiation impacts on cash flow. To do this requires a high degree of detailed analysis and fact-finding to ensure that apparent synergy can be realized in practice. Finally, it is important to measure the cultural fit of the target and the acquiring company to ensure that realizing the synergy will not be inhibited by cultural incompatibility.

References

- (1) P. Barnes, The effect of a merger on the share price of the attacker revisited, *Accounting and Business Research*, Winter, pp. 45-49 (1984).
- (2) J. R. Franks and R. S. Harris, *Shareholders Wealth Effect of Corporate Takeovers; The UK Experience 1955-1985*, Conference on Merger Policy, Institute for Fiscal Studies (1986).
- (3) J. Kitching, *Acquisitions in Europe: Causes of Corporate Successes and Failures*, Business International, Geneva, Switzerland (1973).

Note added in proof

A recent study by McKinsey indicates a success rate of 23%: Sigurd Reinton, *Establishing The Failure Factor*, Euromoney Corporate Finance Supplement, February (1987).

- (4) M. Firth, Takeovers, shareholder returns and the theory of the firm, *Quarterly Journal of Economics*, **94**, 235-260 (1980).
- (5) M. Porter, *Competitive Advantage*, Free Press, New York (1985).
- (6) S. Tully, *Electrolux Wants a Clean Sweep*, Fortune International, Time Inc, Zofingen, Switzerland (1986).
- (7) H. E. Kroeger, *Using Discounted Cash Flow Effectively*, Dow Jones-Irwin, Homewood, Illinois (1984).
- (8) Shannon Pratt, *Valuing a Business*, Chapter 4, Dow Jones-Irwin, Homewood, Illinois (1981).